

# **Nature's Miracle Molecule**

# The Dynamic Duo



Rejuvenates all cell membranes Uncloggs blood vessels Improves liver and kidney function Natural, safe & effective Studied and used since 1950 world wide

# **Plaquex**®

# **Nature's Miracle Molecule**

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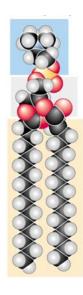
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# A Short History of Plaquex®

Plaquex® was originally developed in the 1950ies in Germany to dissolve fatty clogs during orthopedic surgery. Since then over 1600 papers have been written about all the myriad benefits it has. It has been used in over 50 countries and studied in Germany, Italy, Japan and Russia.

In the early 1990ies a Swiss American doctors' wife had angina (chest pain) due to a clogged coronary artery. She had an angioplasty done, but the symptoms came back six weeks later. She had another angioplasty done, but again — after six weeks – the symptoms came back. The doctor happened upon this product around that time and after studying it, he decided to treat his wife. Within a few weeks the chest pains vanished and she never needed another angioplasty again. He started to treat his office patients and found that it consistently improved the patients' symptoms. He had a few before and after Fast CT scans done and tested the before and after circulation in the legs. He was amazed that not only did the symptoms improve ,but the tests actually showed a reversal of plaque deposits in the arteries. He told his American colleagues who wanted to buy the product, but it was hard to come by. The doctor then decided to have it made for him and called it Plaquex® . Since 2009 it is available legally from the compounding pharmacy AnazaoHealth who has the know how to compound it correctly. The main ingredient is a secret, but it has a US Drug Master File and it has GRAS (generally regarded as safe) status.

# What is Plaquex®



The main "miracle molecule" in Plaquex® is the building block of all cell membranes. It's called Phosphatidylcholine (PC) or to be exact 1,2 dilinoleoylphosphatidylcholine. These molecules consist of a head group made out of choline that is water soluble. Attached to this head group are two chains of fatty acids, that are fat soluble. It is found in soy which delivers PC with unsaturated fatty acid chains as found in Plaquex® and in egg yolk, which delivers PC with saturated fatty acid chains.

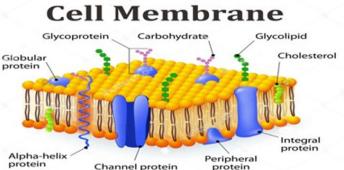
Because the PC molecule has a water and a fat soluble part, it mixes with both mediums. This is why you can use an egg yolk to bind vinegar and olive oil in a salad dressing as the PC in egg yolk binds to both the watery and fatty ingredients.

Cell membranes are formed by two inverted layers of phosphatidylcholine (PC). In between these PC molecules we find receptors that bind to hormones such as insulin, estrogen, testosterone and many more and we find channels that let mineral ions in and out of the cell such as Calcium, Potassium and Magnesium. Other channels let in nutrients into the cell and dispose of waste from inside the cell. We also find cholesterol embedded in between the PC mole-

cules. The optimal function of the cell depends on the optimal function of all receptors and channels in the cell membrane and these depend on a healthy cell membrane with all the PC molecules intact.

We also find such membranes within the cells' organelles such as the mitochondria.

If the cell membrane is made out of PC with mostly saturated fatty acid chains, the membrane is more rigid like a gel and transport of nutrients, waste products and hormones takes place more slowly across the membrane. If most PC molecules making up the cell membrane have unsatu-

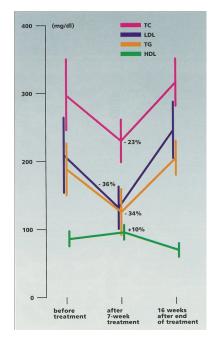


rated fatty acid chains, the trans membrane transport happens up to twenty times faster. Immune cells can only activate if they have plenty of PC molecules with unsaturated fatty acid chains in their membrane. Many enzyme functions depend on the presence of PC with unsaturated fatty acid chains. Enzymes involved in cholesterol elimination such as LCAT (see below) only work well if there are plenty of PC molecules with unsaturated fatty acid chains. Enzymes involved in anti-oxidant production such as Glutathione and SOD enabling enzymes also require PC with unsaturated fatty acids.

Taking PC will actually rejuvenate all cell membranes and optimize their function and the function of the cell and ultimately the organ the cell is a part of, including the skin. This is why many doctors have noticed that patients look younger after they finish a series of Plaquex® infusions.

# Effect on Blood Lipids

Plaquex® elevates the good cholesterol HDL and lowers the "bad" Cholesterol LDL, but only if they are out of bounds. Normal values are not affected by it as it should be. It also lowers Triglycerides that are too high. This effect is more pronounced in people who are non smokers and eat less calories. It does that by affecting certain enzymes used to metabolize and eliminate cholesterol. One of them is called LCAT (Lecithin Cholesterol Acyl Transferase). This enzyme esterizes cholesterol so it can be taken up by HDL and eliminated through the liver. Other enzymes are involved in lowering Triglycerides and these enzymes are dependent on PC with unsaturated fatty acid chains. In a review of studies done on cholesterol levels, mean LDL cholesterol was lowered between 10 and 31% depending on the initial value. Mean HDL cholesterol was raised between 10 and 45% also depending on the initial values. Triglycerides were lowered by 25% on average.



# **Reduced Lipid Peroxidation**

A major factor in plaque development is the oxidation of cholesterol. Be-

sides increasing plaque formation, lipid peroxidation also promotes clotting of blood platelets. Phosphatidylcholine increases the body's most powerful antioxidants Glutathione and SOD (Sodium Oxide Dismutase) and thereby reduces lipid peroxidation and clotting of platelets.

# **Improved Blood Flow**

Plaquex® has an important effect on blood platelets and red blood cells. Increased activation of platelets leads to increased blood clotting. The deposition of platelets on vascular walls enhances the blood vessel walls sensitivity to substances released from these platelets. This in turn increases the permeability of the vessel wall leading to deposit of other substances from the blood plasma into the wall, causing it to bulge into the vessel and constricting the blood flow. Studies show that the application of Phosphatidylcholine reduces the activity of platelets and reduces blood clotting. It also reduces the accumulation of plasma constituents into the blood vessel wall thus reducing the plaque bulge build up that clogs the blood vessels.

Red blood cells are larger than the smallest blood vessels. They need to be flexible and deform to squeeze through these tight blood vessels. If the membrane of red blood cells contain too many PC molecules with

saturated fatty acid chains, the membrane is too rigid and the RBC can't flex enough to pass through easily. When applying Plaquex®, these PC molecules are exchanged with the PC that has unsaturated fatty acid chains. This increases the flexibility of the cell membrane and thus the red blood cell. This improves blood flow through tight blood vessels.

# **Reduced Inflammation**

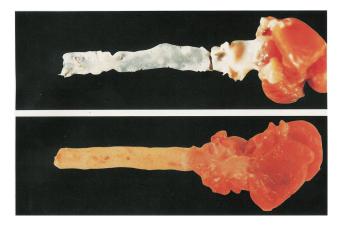
A major contributor to plaque formation is inflammation. Plaquex® inhibits several inflammatory parameters such as Tumor Necrosis Factor alpha, Interleukin 6 and 10 thereby extinguishing the fire that promotes plaque building.

#### **Boosting Immune Response**

New discoveries find that many people suffer from leaky gut where intestinal bacteria pass through the intestinal walls and form bacterial biofilms, preferably in areas of beginning plaque deposits, enlarging the plaque volume. PC with unsaturated fatty acid chains is a requirement to activate immune cells such as macrophages, lymphocytes and monocytes that are a necessity to take down such bacterial biofilms.

# **Reduction of Plaque Deposits**

Studies were done in animals and in humans showing that plaque deposits were prevented when given simultaneously with a diet that promotes plaque build up and they were cleared out if given after they had formed. The photo on the right shows a section of an aorta from a control animal and a treated animal that were both put on a diet promoting atherosclerosis for two months. The control animal has massive plaque deposits (white spots in top photo) while the animal on the same diet, but treated with PC after two months on the same diet shows no plaque deposits. Human studies included Electrocardiogram diagnostics in heart patients and showed significant improve-



ment. The signs of reduced blood flow either vanished completely or were improved markedly. Patients on nitroglycerine could reduce the daily dosage from 8-10 applications down to 1-3 per day. In patients with reduced blood flow to the legs because of plaque deposits, the walking time on a tread mill test was increased from 90-150 feet to two miles.

A few before and after Fast CT scores were done before and after doing a treatment series with Plaquex®. The Fast CT shows the calcium deposits in the heart vessels. The higher the score, the more deposits were found. This score never goes down with time, but in patients that received Plaquex® treatments it was reduced by over 50%. This is considered a miracle by many doctors. But the miracle doesn't end there. Plaquex® also improves liver and kidney function.

# **Improvement of Liver Function**

When the liver is damaged, the cells can't supply enough energy to make phosphatidylcholine to heal itself. PC reduces lipid peroxidation also in the liver and it restores cell membranes and thus cell function. Within 38 years 126 clinical studies were done on over 8300 patients.

Studies show that patients with liver disease show symptomatic improvement and blood test parameters improve as well. Biopsies taken before and after treatment show significant improvement. The cells look healthy under the microscope, inflammation regresses and there is a reduction of liver cell death. There are less fatty infiltrations, less fibrous tissue (a sign of beginning cirrhosis) and improved liver cell regeneration. The hospitalization time is reduced and there are fewer complications. In patients with fatty liver disease, biopsies show significant reduction of fatty deposits and a normalization of liver function.

#### Improvement of Kidney Function

There are about 23 studies showing the favorable effect of PC on kidney disease. Patients with Glomerulonephritis improved within 6 days of receiving treatment. Their edemas started to vanish and Albumin in the blood (a protein lost through the kidneys in this disease) started to increase. Children with chronic nephritis were treated for 30 days with intravenous and oral PC. Signs of intoxication by poorly elimiated waste products improved, blood pressure normalized, loss of blood cells and protein through the kidneys diminished. In adult patients blood parameters such as creatinine and urea improved significantly after 15 days on oral and intravenous PC.

But the miracle doesn't end there. A few studies were done in patients suffering from Psoriasis and Neurodermitis.

#### **Psoriasis and Neurodermitis**

Patients given oral PC showed faster improvement of their skin lesions than patients not given PC. The lesions disappeared or improved considerably after 4 months. It took longer until they returned and they were not as pronounced as the first time. They also vanished or improved again upon repeating the treatment.

# What does the treatment entail ?

Depending on the condition infusions are given twice to three times weekly. Improvements in blood flow usually are noticable after the 10th treatment due to the reduced clotting of platelets and improved flexibility of red blood cells. Further treatment is necessary to actually remove plaque deposits. On average between 20-30 infusions are required. Some patients with severe plaque deposits or stents that are clogged will require more treatments. Each infusion lasts 1.5 hours. After the infusion series is completed, Plaquex® Oral is given to maintain the results achieved. Plaquex® oral is a natural supplement.

#### Safety and Side Effects

Plaquex® is a very safe treatment. Occasionally diarrhea can occur in patients who are doing 3 treatments per week or have severe atherosclerosis. It can usually be improved or eliminated by reducing the amount of treatments per week. Imodium can be taken to improve comfort. In the beginning of

treatment, liver enzymes and cholesterol levels can increase. This is due to the increased elimination of cholesterol deposits from vascular walls. They will normalize with continued treatment and are no cause for concern. Slight burning at the infusion site is possible. If it occurs, tell your doctor so the treatment time and solution can be adjusted.

# Where to get Treatment

You can find a doctor on www.Plaquex® .com. If you can't find one in your area, look for a chelation doctor on www.acam.org and ask about getting Plaquex® treatments. They are usually able to accomodate you.

# A word about generic PC products

Plaquex® is identical to the original German product with which all the studies have been done showing all the benefits. There are generic versions of PC products made by other pharmacies, but some use cheaper, lesser grade PC products that can cause serious side effects such as dissolving red blood cells causing kidney failure. In the best case they don't cause any harm, but they also don't work. The correct PC from Germany must be used in the right amount to make it a safe and effective treatment. Make sure you are receiving the original Plaquex® product made by AnazaoHealth, a compounding pharmacy and FDA approved 503B outsourcing facility in Las Vegas. Their name is on the label of each vial.

# The Importance of Maintenance Therapy

Maintenance therapy after finishing a series of Plaquex® infusions consists of taking Plaquex® Oral and 1 – 2 infusions per month to maintain the results. The recommended dosage for Plaquex® Oral is 2-3 soft gels per day. As some patients may experience soft stool, it is recommended to start with 1 soft gel per day for about 3-4 days and then gradually increase to 2-3 soft gels per day. Plaquex® is extremely safe. The most common side effect is diarrhea which can be easily managed by reducing the dosage. It helps patients with constipation to become regular again.

# Where to get Plaquex® Oral

Plaquex® Oral is usually available from your doctor. If not, you can get it from www.biorica.biz .

# Instances when Plaquex IV may not give the desired results

Disappointing results occur rarely and often are due to one or more of the following situations:

- Patients taking the blood thinner Coumadin/Warfarin are blocking the action of Vitamin K. This vitamin is extremely important to reduce calcium deposits in blood vessels. Without it or with its action blocked, the Calcium build up is faster than Plaquex can take it down. If this is the case, ask your doctor to switch to another blood thinner that doesn't interfere with Vitamin K.
- Stents make it hard for Plaquex to do its job. It may take many more treatments to achieve a modicum of results in the area of the stents as they exert tremendous pressure on the underlying endothelium, causing continued damage provoking scar tissue and plaque formation.
- If doing a Fast CT with Calcium Score, make sure the same machine is used for the before and after

results. If a before score is done with for example a 128 slice machine and the after score with a 256 slice machine, the results can't be compared as the second machine can detect deposits the first machine could never detect in the first place.

- Make certain you are getting the original Plaquex product and not some generic. Many generics are of low quality and many complaints of it not working are due to generic products being used. Make sure you are getting the full dose and not an IV push treatment. The IV push uses a very low dose that can help with reduced blood clotting and give symptomatic relief. But this low dose is not enough to remove plaque.
- If certain lifestyle changes aren't made such as continued smoking, the plaque build up will continue faster than it can be taken down by Plaquex.

# **Additional Suggested Treatments**

It is recommended to add certain supplements to the Plaquex® treatment to increase and speed up the results. Among them are Vitamins D3 and the K Vitamins\* at a high enough dosage. Also, Pomegranate extract is an important nutrient to help reduce plaque deposits. Optimizing any hormone treatments is advisable as optimal hormone levels of thyroid, estrogens, progesterone and testosterone aid in preventing plaque build up. Stress reduction is a major factor in reducing cardiovascular disease risk. Chronic stress increases abdominal fat deposits that are a factory for inflammation promoting substances. Exercise, Yo-ga, Qi Gong and Meditation all aid in reducing stress and coping with stress. In addition, there are mindfulness techniques such as the ones developed by Jon Kabat-Zinn that are very beneficial in dealing with stress.

\* If you are on Coumadin/Warfarin don't take Vitamin K until you can ask your doctor to switch you to another blood thinner that doesn't interfere with Vitamin K.

# Any questions ?

First ask your doctor. Second check the FAQs on www.plaquex.com. Thirdly, contact the medical Plaquex specialists at admin@plaquex.net.

# Citations are available on www.plaquex.com

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# **Plaquex®Therapy**

# Your personal blood vessel clean-up crew

